Clinical Correlation: Establishing a Diagnostic Radiology Patient Consultation Service

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Literature Review:

**Pros**

- Patients:
  - Increases understanding of radiology
  - Improves understanding of disease
  - Enjoy reviewing images with “imaging expert”
  - Decrease anxiety

- Radiologist:
  - Decrease Burnout
  - Resident Education
  - Added value

**Cons**

- Patients:
  - Want result from “their” doctors

- Radiologist:
  - Removes radiologist from revenue-generating activities
  - Unclear reimbursement and compensation
  - Lack full clinical picture to answer questions

Pahade J, et al AJR 2012
Plan: Increase radiologists' visibility and value

1. Install PACS in Mount Sinai Pulmonary fellows clinic consultation room

2. Radiology fellows and senior residents conduct one-on-one patient encounters to review imaging

3. Pre and post imaging surveys assess patient understanding of imaging results, anxiety, willingness to stop smoking, and the role of the radiologist

4. Medical students survey control group: Patients who only saw pulmonology
Materials Needed

☑ Workspace
☑ Computer
☑ PACS

Cost = $0

Grant $ was used to purchase IPADS for patient surveys...

Patients struggled with the technology and pen and paper method was implemented

Computer/ workspace already present in pulmonary clinic
PACS was installed on a standard computer
EMR can also be used for image review
First Day Proposed Workflow:

- **Patient Identification**: Pulmonologists identify patients.
- **Confirm Imaging**: Pulmonary Fellow/Attending identify patients in clinic.
- **Image Review**: Pulmonary Fellow/Attending confirms recent imaging.
- **Communication**: Pulmonary Attending notifies radiologist that patient is appropriate.
- **Consultation**: See patients.

**Communication**: Provide radiologist with patient lists.

**Pulmonaryology teams identified patients with recent imaging**
## Patient Demographics: 84 patients

<table>
<thead>
<tr>
<th></th>
<th>Imaging Review n=48</th>
<th>Control Group n=36</th>
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<tbody>
<tr>
<td><strong>Mean Age (SD)</strong></td>
<td>57 (11.9)</td>
<td>54 (15.6)</td>
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<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Other</td>
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Other Imaging Findings:

- Cystic lung disease
- Malignancy
- Pulmonary Embolism
- Bronchiolitis/ Atypical mycobacterial infection
- Pneumonia

Pre Survey: 21/48 (44%) Image review and 10/36 (28%) pulmonary control patients did not know their CT scan results
Radiologists?

- 14/36 (39%) control (only pulm) patients identified radiologists as physicians

- Pre image review, 34/48 (71%) identified radiologists as physicians, increasing to 90% post image review

95% wanted to meet with a radiologist again to review future imaging
100% found meeting with a radiologist helpful
Results

Smoking Cessation: Pulm only
- No follow up yet: 16.7%
- No change: 83.3%

Smoking Cessation: Pulm+ Image Review
- No show: 23.1%
- Out Smoking: 7.7%
- Decreased: 15.4%
- No follow up yet: 23.1%
- No change: 30.8%

No Show: Pulmonary Visit
- No show: 22.2%
- Return to Clinic: 38.9%
- NA: 38.9%

No Show: Radiology Consultation
- No Show: 16.7%
- NA: 6.3%
- Return to Clinic: 77.1%
Conclusions

- Many Patients are unaware of or do not understand their CT scan results
- After meeting with a radiologist patients have:
  - Better understanding of imaging finding
  - Improved understanding of radiologists’ role
  - Increased desire to stop smoking

Next Steps

- EMR Video Visits
- Screen share images with patients and consult virtually
- Documentation of visit in EMR